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APPLICATION	NO. F	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/523,024		02/02/2005	Arcangelo Manfiotto	2520-1051	7456	
466	7590	01/23/2006		EXAMINER		
	G & THOM			SHAH, SAMIR M		
745 SOU 2ND FL	JTH 23RD ST	TREET		ART UNIT	PAPER NUMBER	
	GTON, VA	22202		2856		
				DATE MAII ED: 01/23/2006	4	

Please find below and/or attached an Office communication concerning this application or proceeding.

-	Application No.	Applicant(s)	
	10/523,024	MANFIOTTO ET AL.	CM
Office Action Summary	Examiner	Art Unit	
	Samir M. Shah	2856	
The MAILING DATE of this communic Period for Reply	ation appears on the cover sheet with	h the correspondence address	ş
A SHORTENED STATUTORY PERIOD FO WHICHEVER IS LONGER, FROM THE MA - Extensions of time may be available under the provisions of after SIX (6) MONTHS from the mailing date of this commur - If NO period for reply is specified above, the maximum statu - Failure to reply within the set or extended period for reply wi Any reply received by the Office later than three months afte earned patent term adjustment. See 37 CFR 1.704(b).	ILING DATE OF THIS COMMUNIC 37 CFR 1.136(a). In no event, however, may a relation. tory period will apply and will expire SIX (6) MONT II, by statute, cause the application to become ABA	ATION. ply be timely filed HS from the mailing date of this commun. NDONED (35 U.S.C. § 133).	·
Status			
1) Responsive to communication(s) filed 2a) This action is FINAL . 2b 3) Since this application is in condition for closed in accordance with the practice.	r) This action is non-final. From allowance except for formal matte	•	its is
Disposition of Claims			
4) Claim(s) 1-5 is/are pending in the app 4a) Of the above claim(s) is/are 5) Claim(s) is/are allowed. 6) Claim(s) 1-5 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction Application Papers 9) The specification is objected to by the 10) The drawing(s) filed on is/are: a Applicant may not request that any objection Replacement drawing sheet(s) including the 11) The oath or declaration is objected to be	withdrawn from consideration. on and/or election requirement. Examiner. a) accepted or b) objected to be on to the drawing(s) be held in abeyand the correction is required if the drawing(s)	e. See 37 CFR 1.85(a). i) is objected to. See 37 CFR 1.1	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim fo a) All b) Some * c) None of: 1. Certified copies of the priority do 2. Certified copies of the priority do 3. Copies of the certified copies of application from the Internationa * See the attached detailed Office action	ocuments have been received. Ocuments have been received in Ap I the priority documents have been related the Bureau (PCT Rule 17.2(a)).	plication No eceived in this National Stag	e
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-3) Information Disclosure Statement(s) (PTO-1449 or Paper No(s)/Mail Date 2 February 2005.		/Mail Date ormal Patent Application (PTO-152)	

DETAILED ACTION

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Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the metallic contact, preferably a spring, exiting from the housing of the boiler and contacting with said metallic disc, according to claim 5 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "3" and "5" have both been used to designate 'a Teflon joint'. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

Content of Specification

- 3. There are no headings or titles in the specification. It is suggested that the applicant follow the information provided below to amend the specification accordingly.
 - (a) <u>Title of the Invention</u>: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
 - (b) <u>Cross-References to Related Applications</u>: See 37 CFR 1.78 and MPEP § 201.11.
 - (c) <u>Statement Regarding Federally Sponsored Research and Development:</u> See MPEP § 310.

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(d) <u>The Names Of The Parties To A Joint Research Agreement</u>: See 37 CFR 1.71(g).

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(e) Incorporation-By-Reference Of Material Submitted On a Compact Disc:
The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.

Or alternatively, Reference to a "Microfiche Appendix": See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.

- (f) <u>Background of the Invention</u>: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
 - (1) <u>Field of the Invention</u>: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
 - (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."
- g) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.

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(h) <u>Brief Description of the Several Views of the Drawing(s)</u>: See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.

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- (i) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.
- (j) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).
- (k) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).
- (I) <u>Sequence Listing.</u> See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.
- 4. The disclosure is objected to because of the following informalities: the word 'continuos' in column 1, lines 16 and 26 is spelled wrong. It should read 'continuous'.

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Column 3, lines 15 and 18 both refer to figure 3. The latter should read 'figure 4' instead of 'figure 3'. The same reference number 3 is used for 'a probe body' in column 3, line 25 and for 'a Teflon joint' in column 4, line 24.

Appropriate correction is required.

Claim Objections

5. Claim 4 is objected to because of the following informalities: According to MPEP §608.01(m), "Each claim begins with a capital letter and ends with a period. Periods may not be used elsewhere in the claims except for abbreviations."

Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the electric contact" in the 5th and 6th lines of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 further recites the limitation "the signal" in the second to last line of the claim. There is insufficient antecedent basis for this limitation in the claim.

9. Claim 2 is rejected under 35 U.S.C. 112, second paragraph.

Claim 2 contains the trademark/trade name Teflon. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe material of the joint and, accordingly, the identification/description is indefinite.

10. Claim 5 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The applicant discloses "a metallic contact, preferably a spring, exiting from the housing of the boiler and contacting with said metallic disc." It is clear from figure 6 that probe (4) is the only part exiting from the housing of the boiler but it is clear from figure 2 that probe (4) is not contacting metallic disc (7). Also, probe (4) is not a spring. There is no other description of such a metallic contact, anywhere else in the Specification. As

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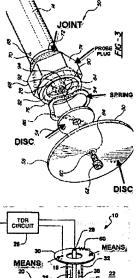
a part of the instant invention, there are many different possibilities of having a metallic contact that is exiting from the housing of the boiler and is contacting with the metallic disc. Therefore, on the basis of what is set forth in *In re Wands*, 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988), it would require undue experimentation to implement such a metallic contact to practice the claimed invention.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 12. Claim 1 rejected under 35 U.S.C. 102(b) as being anticipated by Innes et al. (US Patent 5,943,908 henceforth "Innes").



As shown in the drawing on the top-left, Innes teaches a probe plug (74) in column 5, lines 20-25; it teaches a joint (70) in column 5, lines 14-17; it teaches a disc element (30) for an electric contact in column 4, lines 13-14; it teaches a spring (86) in column 5, lines 41-47. As shown in the drawing on the bottom-left, Innes teaches means for supplying probe and/or transmitting an electric signal to a circuit board.

Thus, Innes reasonably appears to teach and disclose every element of claim 1 and therefore anticipates this claim.

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Allowable Subject Matter

13. Claims 2-5 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

- 14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - U.S. Patent 6,065,336 to Liang (henceforth "Liang")
 - U.S. Patent 6,289,731 to Lo (henceforth "Lo")

Liang teaches a disc-element with holes for screws but fails to disclose an electric contact of the disc-element.

Lo teaches a probe to detect liquid-level but he fails to disclose a spring for an electric contact.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samir M. Shah whose telephone number is (571) 272-2671. The examiner can normally be reached on Monday-Friday 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SMS SILL

CHARLES GARBER PRIMARY EXAMINER